PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 03060 UP		FOR FURTHER ACTION	See Form PCT/IPEA/416					
International application No.		International filing date (day/month/y	pear) Priority date (day/month/year)					
PCT/EP2004/012507		05.11.2004	06.11.2003					
International l	Patent Classification (IPC) or nati	onal classification and IPC						
C21 C7/00, C21 B5/02, C21 B5/00								
Applicant SACHTLEBEN CHEMIE GMBH								
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.								
2. This	REPORT consists of a total of	5 sheets	, including this cover sheet.					
3. This	report is also accompanied by A	NNEXES, comprising:						
a.	(sent to the applicant and	to the International Bureau) a total of	2 sheets, as follows:					
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).							
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental								
	Box.							
b.	(sent to the International	Bureau only) a total of (indicate type a	nd number of electronic carrier(s))					
	related therete, in computer	readable form only as indicated in t	, containing a sequence listing and/or tables					
related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).								
4. This	report contains indications relati	ng to the following items:						
	Box No. I Basis of the	report						
	Box No. II Priority							
	Box No. III Non-establi	shment of opinion with regard to nove	ty, inventive step and industrial applicability					
	Box No. IV Lack of uni	ty of invention						
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
	Box No. VI Certain doc	uments cited						
	Box No. VII Certain defects in the international application							
	Box No. VIII Certain observations on the international application							
Date of submi	ssion of the demand	Date of comple	ction of this report					
Name and ma	iling address of the IPEA/EP	Authorized off	icer					
Facsimile No.		Telephone No.						

International application No.

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Вох	No. I	Basis of the report						
1.		h regard to the language, this report is based on the interna cated under this item.	tional application in the language in	which it was filed, unless otherwise				
	This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:							
		international search (Rule 12.3 and 23.1(b))						
	publication of the international application (Rule 12.4)							
	international preliminary examination (Rule 55.2 and/or 55.3)							
2.	2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):							
		the international application as originally filed/furnished						
	\boxtimes	the description:						
		pages 1-5		as originally filed/furnished				
		pages*	received by this Authority on					
		pages*	received by this Authority on					
	\boxtimes	the claims:						
		nos.		as originally filed/furnished				
		nos.*						
		nos.* 1-9		01.09.2005 with letter				
		nos.*						
	П		received by this Additionly on					
	Ш	the drawings:						
		sheets		as originally filed/furnished				
		sheets*						
	_	sheets*	received by this Authority on .					
	Ш	a sequence listing and/or any related table(s) – see Supple $\frac{1}{2}$	emental Box Relating to Sequence L	isting.				
3.		The amendments have resulted in the cancellation of:						
		the description, pages						
		the claims, nos.						
		the drawings, sheets/figs						
		the sequence listing (specify):						
		any table(s) related to sequence listing (specify):						
4.	\boxtimes	This report has been established as if (some of) the ame they have been considered to go beyond the disclosure as						
		the description, pages						
		the claims, nos4,7-9						
		the drawings, sheets/figs						
		the sequence listing (specify):						
		any table(s) related to sequence listing (specify):						
*	If ite	em 4 applies, some or all of those sheets may be marked "s	uperseded."					

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Box 1			rticle 35(2) with regard to novelty, inventive step or industrial applicability; pporting such statement	
1.	Statement			
	Novelty (N)	Claims	2, 6	YES
		Claims	1, 3-5	_ NO
Inventive step (IS)		Claims		YES
		Claims	2, 6	_ NO
	Industrial applicability (IA)	Claims	1-6	YES
		Claims		- NO
				_

- 2. Citations and explanations (Rule 70.7)
 - 1. Prior art

D1: US-A-5 554 207

D2: US-A-4 362 559

D3: DE 101 32 843 A

2. Amendments

The amendments to claims 4 and 7 to 9 go beyond the disclosure in the application as originally filed, because the formation of titanium carbides, titanium nitrides and/or titanium carbonitrides is only disclosed in connection with certain additives. The amendments thus constitute a generalisation, which is not permissible, and have therefore been disregarded (PCT Rule 70.2(c)).

Moreover, claims 7 to 9 relate to inventions in respect of which no international search report has been established. For this reason too, these claims cannot be examined (PCT Rule 66.1(e)).

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

3. Novelty

The features of claims 1, 3, 4 and 5 are already known from the prior art documents D1, D2 and D3. The features of claim 3 are regarded as implicitly disclosed together with the other features.

Document D3 relates to a method for conditioning dust particles, more particularly filter dust particles, and to a method for manufacturing metal. The dust particles which are to be conditioned are introduced into an extruder (12) together with a binder in a predefined mixing ratio. The dust particles are mixed with the binder in the extruder (12) to form a plastic material. After mixing, the plastic material is moulded into shaped elements. The binder is melted in the extruder (12) and the dust particles are then added to the molten binder. Before the moulding stage the plastic material in the extruder (12) is cooled, preferably to a temperature in the range between 50 and 250°C. Alloying and/or slag-forming ingredients may also be added for steelmaking purposes. The proportion of dust particles in the plastic material is between 5 and 95%, and the binder is a thermoplastic and/or thermosetting material or an artificial or natural resin or plastic waste material (see claims 1 to 9, 13 to 16, the abstract, and column 3, lines 1 to 6).

It is generally known that thermosetting materials contain nitrogen. It is also noted that dust particles produced in steel manufacturing, as in D3, contain (among other things) FeO, SiO_2 , CaO, MgO, Al_2O_3 and TiO_2 .

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Hence these materials are implicitly disclosed in D3.

Thus all the features of claims 1, 3, 4 and 5 are anticipated by D3.

4. Inventive step

The addition of an undefined amount of synthetic titanium dioxide is unlikely to have any technical effect with very small concentrations. Claim 2 therefore does not involve an inventive step.

Injecting additives into liquid melts is a routine procedure. Claim 6 therefore does not involve an inventive step.